

March 10, 2006

Andrew Kolosseus
Washington State Dept. of Ecology
Water Quality Program
PO Box 47600
Olympia, WA 98504-7600

Re: Comments on the preliminary draft of the Irrigation System Aquatic Weed
Control State Waste Discharge General Permit

Andrew,

Please consider the following as the comments of the Washington Toxics Coalition on the February 7, 2006, preliminary draft of the 2007 Irrigation System Aquatic Weed Control State Waste Discharge General Permit.

Comment 1. We have specific concerns about the method by which this permit will determine the point of compliance, or the edge of the area for the short-term water quality modification. The use of the term "natural waters" has posed problems of interpretation in the field. However, moving to another narrow definition of the measurable border between irrigation canals and natural waters will continue to lead to problems of interpretation. We are concerned that if the permit moves the point of compliance to the upper reaches of anadromous salmon runs, many riparian areas with important habitat for other wildlife will be excluded from protections and therefore be at risk from possible exposure to pesticides.

One common-sense answer would be a series of possible definitions of the point of compliance, with whichever is the most protective of habitat and wildlife chosen. Anadromous salmon runs should be one of the measures, but we also need to consider habitats with important native vegetation, fish, and aquatic animals, along with areas that are used by wildlife. None of these areas should be treated with pesticides intended for irrigation canals.

Comment 2. This permit should be issued as a NPDES, providing more protections for communities from unnecessary pollution of our waterways.

Comment 3. The requirements for development and use of IVMPs need to be strengthened and enforced. IVMPs are important tools for identifying alternative vegetation control and prevention methods, and also are vital for this permit to comply with AKART requirements. IVMPs need to be required for all sites, and should not be approved when they merely consider and dismiss non-chemical management methods. Instead, the department needs to ensure that IVMPs identify and utilize multiple ways to implement available, non-chemical and least-toxic vegetation management technologies

and techniques. The Clean Water Act is clear in its requirement for using non-chemical methods, when available, before allowing the discharge of pollutants.

Comment 4. Individual coverages under this permit should not be extended for the entire five years of this permit. Five years of coverage does not consider changing vegetation situations and may allow unnecessary pesticide use. In addition, the draft permit is inconsistent with current state regulations on short-term water quality modifications.

Question 4.1. How does the permit, as written, satisfy the limitations of WAC 173-201A-110-1C (which remains in effect until EPA approves the new water quality standards) that restrict the length of coverage for a short-term water quality modification?

Question 4.2. Current state regulations require Ecology to determine that the short-term modification is essential to accommodate essential activities, respond to emergencies, or to otherwise protect the public interest. Where is the determination that one of these situations exists?

Thank you for this opportunity to comment on the preliminary draft, and please keep us up-to-date on the drafting process.

Sincerely,

Angela Storey
Pesticides Organizer
Washington Toxics Coalition
206-632-1545 ext 111
astorey@watoxics.org

SOUTH COLUMBIA BASIN IRRIGATION DISTRICT

IRRIGATION SYSTEM AQUATIC WEED CONTROL PERMIT COMMENTS/CORRECTIONS

S1.A. – page 5

Take out the word “water.” That brings it in line with the last sentence of the same paragraph, “irrigation conveyance system.”

S1.B.4. – page 5

Take out “at monitoring points within or.” Monitoring points are not by definition the compliance points.

S1.B.5. – page 5

Take out the word “courses.” *Webster’s: course – a way, path, or channel of movement: as a race course, golf course.* The channeled scablands are evidence of water courses but did not include the presence of surface water for perhaps thousands of years and pre-construction.

S1.B.7. – page 6

Take out “water treated with fluridone may not be discharged to [natural waters].” This would prevent the use of fluridone where we most need it. The time frame (November to March) for use of the product is in the non-irrigation season. Applications will be to tanked water between check structures or to dry ditches. The comparatively long contact time required for herbicidal activity with fluridone requires the water to be held static, or with as little outflow as possible. Seasonal timing and contact time necessary for herbicidal activity will suffice. There is no need for this additional constraint.

S2.A. Table 1 – page 6

Spacing the two samples “at least 2 hours apart” is a better representation of the chemical residuals of acrolein but is problematic for copper treatments.

S2.B.3. – page 7

“The DMR must also provide evidence . . . treated water was consumed.” Please specify what evidence is acceptable.

S2.D. – page 8

Should take out “and at a minimum frequency of at least one calibration per year.” “Accepted industry standard” and “manufacturer’s recommendations” should suffice.

S5.B. – page 10

This wording needs to be changed or eliminated from the permit. The District’s current monitoring for each application was essentially a continuous travel study because circumstance of flow varies with each application.

P2. and P3. – page 12

The District believes that this change will be very cumbersome and not at all practical because there would be so many posting sites. It was agreed with Allen Moore that barricading and proper signs were adequate public notice. Further consideration is needed. Verbiage will need to be clarified on the permit—perhaps through P3 variations.

Additionally, the definition of “natural waters” in S1.B.5. as written may not be adequate. The District is concerned that the Washington Fish and Wildlife interpretation will preclude the use of aquatic herbicides in any return flow system. The continual degradation of the definition of “natural waters” will have a serious impact on the District’s ability to safely and effectively make water deliveries as needed.



WENATCHEE RECLAMATION DISTRICT

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March 2, 2006

Department of Ecology
Water Quality Program
MAR 06 2006

Andrew Kolosseus
Washington State Department of Ecology
Water Quality Program
P O Box 47600
Olympia WA 98504-7600

Dear Andrew:

I would like to submit the following comments on the Draft NPDES Permit after our meeting in Sunnyside on February 22, 2006:

I request that the original language of the first permit be used for the discharge limitations. Copper, dissolved, 25 ug/l. The maximum daily limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. The maximum daily discharge is the average measurement of the pollutant over the day.

As I described to the group, in order to ever hope for adequate control of the algae in a system such as ours, we have to have a concentration to achieve control. Water is moving from 4-7 feet per second and is only in our system of 34 miles for approximately 24 hours. Contact time and concentration levels are mandatory to obtain control of the algae so that our water users are able to use our water.


As I explained, we use a composite sampler to gather our travel time information and to pinpoint peak concentration levels. I would also like to utilize our existing travel time work that we have documented over the last five years. It is also reflective of flow ranges for our system and very accurate.

An additional point I would like to recommend is that in a system such as ours, if we are in compliance at the uppermost spillway, the burden for monitoring at spillways below seems very redundant. We try to treat every two weeks and flows, product and timing are very stable and consistent.

Andrew Kolosseus
March 2, 2006
Page Two

I look forward to being on the review committee and appreciate the opportunity to comment on this draft permit. I am looking forward to your visit in March.

Sincerely,

A handwritten signature in black ink, appearing to read "Ricky J. Smith". The signature is fluid and cursive, with the first name "Ricky" being more prominent and the last name "Smith" following in a similar style.

Ricky J. Smith
Superintendent

cc: Ray Latham
Randy Asplund, RH2 Engineering

Roza-Sunnyside Board of Joint Control

P.O. Box 810 ■ Sunnyside, WA 98944 ■ (509) 837-5141

March 8, 2006

Andrew Kolosseus
Water Quality Program
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Department of Ecology
Water Quality Program
MAR 10 2006

Re: Irrigation System Aquatic Weed Control – State Waste Discharge General Permit

Andrew
Dear Mr. Kolosseus:

On behalf of the Roza Irrigation District (RID) and the Sunnyside Valley Irrigation District (SVID) the Roza-Sunnyside Board of Joint Control (RSBOJC) offers comments on the above referenced permits. We understand, under separate cover, a request has been made for the Department of Ecology (WDOE) to issue a General National Pollutant Discharge Elimination System Permit (NPDES). Our comments are set forth below:

- **Page 3:**

- We appreciate the submittal date displayed directly on the Summary of Permit Report Submittals
- Please consider allowing the irrigation districts to submit a letter prior to the irrigation season to WDOE stating the months for which no treatments are scheduled. This would be in lieu of submitting monthly DMRs for those months during which there are no treatments.

- **Page 5: S1, [Natural Waters]**

- The use of WDFW Streamnet Data Base maps to delineate natural surface waters and points of compliance is not acceptable. These maps show

■
Mike
Miller
Chairman

■
Doug
Simpson
Vice
Chairman

■
Ron
Van
Gundy
Secretary

■
Patricia
Bailey
Treasurer

anadromous fish spawning and rearing habitat areas in Roza Irrigation District and Sunnyside Valley Irrigation District facilities far upstream of reasonable compliance points. The waters identified in the Streamnet Data Base are irrigation return flows and drains. There are no "natural surface waters" within our Districts that could support fish spawning or habitat. The Molenaar Report (1985) by Ecology in cooperation with USGS concluded that there were no natural perennial tributaries on the north side of the lower Yakima River. That document is just one of several that substantiate the absence of natural water courses traversing the Roza Irrigation District and the Sunnyside Valley Irrigation District. We do not want to erroneously portray the drains as natural surface waters. Examples of unacceptable points of compliance which would result from use of the WDFW maps include:

- Corral Creek Wasteway is marked as anadromous fish spawning and rearing habitat from the Yakima River to a point *above* the Roza Canal. Corral Creek Wasteway is dry at the end of the Roza Canal unless RID is spilling water. Designating the compliance point at this point would make it impossible to have an effective concentration of acrolein in the Roza Canal to treat aquatic weed growth and then have a concentration low enough to meet the maximum allowable concentration at the point of compliance.
- Snipes Creek Wasteway and Spring Creek Wasteway are marked as fish spawning and rearing habitat from the Yakima River up to Old Inland Empire Highway. Both current compliance points on Spring Creek Wasteway and Snipes Creek Wasteway are south of the Chandler Canal. These compliance points need to remain at established water quality sites for personnel safety and accessibility.

- Sulphur Creek Wasteway is marked as fish spawning and rearing habitat from the Yakima River, extending two miles upstream and then splitting into three different branches. Two of the branches are drains or wasteways and the third is Snipes Lateral which is part of the SVID system to be treated.
- The RSBOJC with funding assistance from the Bureau of Reclamation has just completed a draft preliminary design for a fish barrier $\frac{3}{4}$ mile upstream of the mouth of Sulphur Creek Wasteway. The Yakama Nation and other fisheries interests are involved in the review of the design of this facility. The point of compliance should be downstream from the proposed fish barrier.
- The RSBOJC has established Water Quality Monitoring sites in all three of these wasteways to monitor turbidity to meet the state TMDL established for the Yakima River. The water in the irrigation districts' facilities must meet this TMDL standard when the water enters the Yakima River. We propose that these sites be the points of compliance for the Sunnyside Valley and Roza Irrigation Districts.
- We don't believe one definition of "natural surface waters" will work for every irrigation district. We suggest striking "natural surface waters" from the general permit and replacing it with reference to irrigation district maps with points of compliance noted therein.
- The use of WDFW Streamnet Data Base maps does not recognize the legal authority and obligation of irrigation districts to operate and maintain drains and wasteways under the authority granted by the Bureau of Reclamation and state and federal law.

- **Page 5, S1. B. 4.** Amend as follows:

“The points of compliance with these limitations are at or above where the irrigation district discharges into a water body that existed prior to the development of the respective irrigation project. These compliance points for an individual permittee will be as set forth on irrigation district maps attached to the permit.”
~~at monitoring points within or at the terminus of the irrigation system that represent water exiting the irrigation system and entering natural waters.~~ These limitations are:

- **Page 6, S2. A.**

- Last box in Table: The space of time between samples to define the peak is based on each district's canal and laterals physical size, shape, and flow. This number may be more properly defined by each district's Time of Travel studies for the treated pulse or block of water. Consider having the district provide a defining pulse sampling time in their monitoring report.

- **Page 7, S2. D.** Flow Measurement

- Irrigation districts use standard measuring devices, rated sections, meters, and other devices. They may also rely other governmental agencies' data such as is available at United States Bureau of Reclamation hydromet stations. We suggest more appropriate language to cover the broad spectrum of measuring devices and their particular circumstances, language similar to the following be adopted:

“Measuring devices shall be operated and maintained consistent with industry standards.”

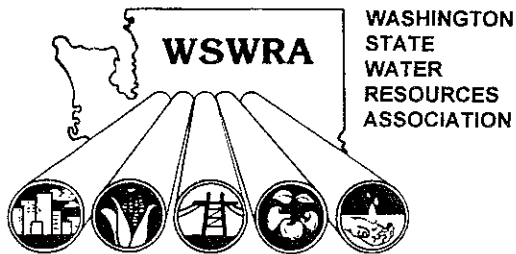
- **Page 9, S3.G. 1.a.**
 - Change sentence to reflect: “ ~~Immediately~~ Notify the Department with 24 hours after sample results are returned from the laboratory of the failure to comply.”
- **Page 10, G. 1.c. 4th sentence into the paragraph:**
 - delete “the anticipated time it is expected to continue;”
- **Page 10, S5. B. Time Travel Study.**
 - The time of travel subject should be placed after the S2 monitoring requirements, possibly as S2. E. The time of travel studies will be on a form that is easy to read and that covers a specific lateral or canal. The multiple year studies can be identified as such and correlations may be made for low to high water years and time of year. A time of travel study shall be made at least every 5 years for each lateral or canal.
- **Page 12, P2.A.**
 - Include the ability for irrigation districts to erect a barrier to traffic on the canal road to deny traffic at the time of injection of acrolein or xylene as an alternate to year round posting of signs. On the barrier will be the contact information as required in P2. B. 1-3.

Thank you for the opportunity to comment on this draft permit. I am available to discuss any of our comments with you should clarification be needed.

Sincerely,



Elaine Brouillard
Water Quality Specialist



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February 22, 2005

Mr. Dave Peeler
Water Quality Program Manager
Washington State Department of Ecology
PO Box 4700
Olympia, WA 98501-4700

Re: Irrigation Systems Aquatic Weed Control NPDES Permit

Dear Mr. Peeler:

I am writing on behalf our member irrigation districts who have National Pollution Discharge Elimination System (NPDES) permits for Irrigation System Aquatic Weed Control issued by Ecology in 2002. The Washington State Water Resources Association is the coordinating agency for irrigation in Washington State. The WSWRA members worked closely with Ecology staff to develop the 2002 NPDES permit and the Short-Term Water Quality Modification that preceded the permit. We have produced engineering reports supporting the use of Acrolein, Copper Sulfate and Xylene under the 2002 NPDES permits. Our members have worked diligently to craft monitoring and compliance programs that meet all of Ecology's requirements.

The WSWRA member districts have been notified that their current permits will expire in 2007 and that the Department of Ecology will not be re-issuing the NPDES permits. Instead, Ecology intends to issue State Water Quality Discharge Permits based on authority found in RCW 90.48. We believe that it is in the districts' best interest to continue to hold Clean Water Act based Section 402 NPDES permit and therefore WSWRA requests that Ecology issue an NPDES permit for Irrigation System Aquatic Weed Control in 2007. We understand that there is still time to incorporate the procedural requirements of the CWA NPDES permit into the schedule that has already been established for the state discharge permit.

I look forward to hearing from you regarding this request and will provide any information you may need in making your decision.

Sincerely,

Thomas G. Myrum
Executive Director



KITTITAS RECLAMATION DISTRICT
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March 2, 2006

Andrew Kolosseus
Dept. of Ecology
P.O. Box 47600
Olympia, WA 98504

Andrew,

Here are comments on the draft Irrigation System Aquatic Weed Control Permit dated 2-7-2006. If I haven't made my point clear in the comments below, please call me and I will be happy to discuss any of these points and give data to support our views.

S1.B.4. (page 5) Changing the limitation on concentrations from a 24-hour average to an instantaneous limit, effectively cuts the concentration of copper (concentration, not amount) that is allowed to be spilled by a factor of three. For some districts, who have been using a composite sampler to get a 24-hour average, this reduction would be even more. The peak of a slug application at the compliance point can be very short.

Over the past few years, districts have reduced their copper use to the minimum that will maintain control algae within their canals. To meet the new limitations in this permit, districts will have to change their application to meter the product out over a longer period to flatten out the peak concentration and extend the time that the copper is present at the compliance points. The amount of copper reaching natural waters will not change, just the size of the peak will be smaller and the duration longer. How is that beneficial to the environment?

Districts use the slug method of application because it is easier than metering the product out continuously, and it is effective. The label does recommend using a continuous application method for algae control by applying 0.1 to 0.2 pounds per cfs per day. This would never exceed 25 ug/l at compliance points, but would cause an elevated level of copper at spills to natural waters for as long as we are running water. It would be more labor intensive and lab costs for running two samples at every compliance point every day would be huge. We would also use about five times the amount of copper we currently use, and therefore spill five times as much. What is the environmental benefit?

S2.A. Table1 (page 6) Shouldn't flow measurements be taken "concurrently with sampling" rather than 2 times per treatment?

The requirement that samples must be taken two hours apart is not appropriate for many cases. At some compliance points, the peak lasts just twenty minutes and is down near the detection limits in two hours.

For copper applied by a slug method, a more reasonable space between samples would be 5-10% of the travel time. For acrolein, which has a long application time, two hours may be appropriate.

Some districts use an automatic sampler to take multiple samples at a fixed interval to capture the peak concentration at a compliance point, and then use a colorimeter to determine which sample is the peak. Other districts have personnel in the field at the compliance points sampling the water and running field tests. For these districts, forcing them to run two lab samples would be doubling their lab costs, and increasing their personnel time in the field for no benefit. Some of us know when the peak is and do not rely on travel time estimates. We should not be penalized for doing a better job.

S2.B.2. (page 7) In the past, one sample was sufficient to show whether held water had residual herbicide concentrations after being released. Several times districts would take two samples to investigate whether concentrations were different between the water as it is just released and the water that shows up at the spill ten or twenty minutes later. Having people sample two hours after you start to spill is a waste of time. Any ponded water would be long gone by then.

S2.B.3. (page 7) If there is a turnout at the end of your canal, you can deliver treated water (consume it) and not dry up your canal. In other words, you can have water checked at your tailend, and still consume the water. The spill is dry, the canal is not.

S3.C. (page 9) Could we change "at least 24 hours prior" to "the day prior". We usually try to treat early in the morning, sometimes as early as 6AM, and to notify at least 24 hours in advance, really means two days.

S3.G.1.a (page 9) This section talks about notification after a failure to comply. Sample results are not back from the lab for up to three weeks after the treatment. Are the deadlines in this section for after sample results are received?

S5.B. (page 10) The requirement that everyone do a travel time study on all application points in 2007 assumes that districts have not already done such a study. Some districts do hourly sampling at compliance points during every treatment, so they have a very good idea of their travel times and the variables that effect them. Flows are not the only parameter that effects travel time. Weed growth can slow the water down dramatically, but is difficult to quantify. If you want assurance that sampling is being done during peak concentrations, then ask the districts to supply their data justifying their timing of samples. If a district has personnel out at the compliance points doing fifteen minute field readings, why demand that they do travel time studies? They are getting known peaks rather than estimating them using a travel time study. If a district ponds their tailends during every treatment, and holds it for 48 hours, why do they care about travel times? Why do a travel time study for application points that have no compliance points associated with them? One size does not fit all.

The justification for this study is that some districts have changed their systems in some way that would effect travel times. Well, most have not. How about requiring districts that have changed their systems, and are using an estimated travel time to take their samples, show they are updating their travel time information. Many districts do not use an estimated travel time to take their samples, and should not be required to do any such study – ever.

P2.B.2. (page 12) Most districts are U.S. government property. Drop the "private property" requirements on the signs.

Sincerely,
Roger Satnik

Kolosseus, Andrew

From: Betsy Jordan [bjordan@qcbid.org]
Sent: Wednesday, March 01, 2006 2:20 PM
To: Kolosseus, Andrew
Cc: Darwin Fales
Subject: Comments on Irrigation System General Permit

Hi Andrew,

I have a few comments that I would like to share with to you for the Aquatic Weed Permit for Irrigation Districts.

You asked us to consider what would work in the spots for "natural waters". In considering this question, I am sure everyone has come to the conclusion that no matter what is put into that place, someone will surely disagree. As with the first permit cycle, there is always heartburn over terms and definitions. However, I do not like the request that Fish and Wildlife had for the replacement of natural waters, which made a statement about the compliance points being "upstream of anadromous fish...". The District has always made the statement that fish that enter our facilities are trespassing and interrupt the maintenance and control of our water and facilities. Making a statement that spells out upstream, what happens when someone from the public decided to dump fish into our ditches or canals miles above the compliance point. According to the permit, our compliance point could potentially change immediately. I veto that suggestion as unworkable.

One point that I feel is obvious in this permit is the fact that this permit is for irrigation waters. While in our system, the primary purpose of the water is for irrigation. If other uses can be supported without interrupting the main purpose of irrigation, then I feel that everyone would agree that it is great. The Districts are good stewards of the water and do everything within our power to ensure that the water quality does not drop while under our care, custody and control.

The permit is written to give Irrigation Districts the avenue to apply aquatic chemicals to control weeds. The Districts have the responsibility and liability to apply the chemicals according to the FIFRA label and the NPDES permit. Who but the Districts would be the best ones to know how to accomplish this and stay within the confines of the law? Who else but the Districts would know the best place for a compliance point to avoid violating the permit, the label and ESA issues? And who carries the liability? I would say the Districts. So if we carry the risk and liability and responsibility, shouldn't we also be able to best say where the compliance points are so we can stay within compliance? For the purpose of having to say something in the permit, I would recommend either of the two paragraphs in the draft permit on page 5 of 18, either B.4 or B.5 with the following changes:

B.4 The points of compliance are within or at the terminus of the irrigation system project that represent water exiting the irrigation system.

or

B.5 The points of compliance are located where surface water existed prior to the alteration of water drainage and creation of reclamation and irrigation projects.

Under S2 Monitoring requirements at the bottom of the table. Add the fact that two samples are required unless a written variance has been granted by DOE.

S2.B.3. Do we need to specify what evidence is considered sufficient?

Change S5 to reflect past time travel studies for a period of five years prior. If you have any specific info you would like on the time travel studies, we should probably talk about that and include in the permit, so there are no miscommunication problems later.

Will anything else be changed or added to once this is changed to a combo state and NPDES permit?

3/15/2006

Thanks for the chance to comment Andrew Please contact me if you for need any additional info. My # (509) 787-3591

Betsy Jordan
bjordan@qcbid.org

Kolosseus, Andrew

From: Elayne Fuller [efuller@ecbid.org]
Sent: Thursday, March 09, 2006 3:46 PM
To: Kolosseus, Andrew
Subject: Preliminary Discharge Permit

Hi Andrew,

The East Columbia Basin Irrigation District has the following comments on the draft discharge permit for 2007:

On page 4: comment deleting all of C4 (NPDES-related). We recommend this portion of the coverage under the NPDES not be deleted. It states..."Grounds for termination of coverage in addition to that found in G5, G16 and G20 include change in regulatory status that indicates that the activity should not be subject to CWA Section 402. Regulatory status for a permittee under this general permit will be determined by the Department based on new information that demonstrates how the permitted activity should not be regulated under CWA Section 402".

S1.B4 Points of compliance definition would read "points of compliance are at natural waters which existed prior to the alteration of water drainage created by reclamation and irrigation projects"

S2.A Table 1 We recommend staying with our current method of monitoring which requires 3 samples for each acrolein and xylene application at calculated travel times. i.e.: 90%, 100%, 110%. Copper monitoring should continue with 1 sample per week at each compliance site on alternating days.

S2.B3 Comments in the comment column on the DMR should suffice.

S2.D Flow measurement devices were installed by USBR during construction of the Columbia Basin Project. Yearly calibration of measuring devices is not feasible since these structures are set in concrete. If new structures are installed, these are set at elevation at time of construction. These structures ARE the industry standard.

S3.C We recommend we keep a weekly reporting method already established. (Treatment locations don't change)

S5.B Time travel studies...Recommend having this section incorporate past time-travel studies already done. All applications will vary. Please note conditions usually cannot be placed on flows. Irrigation demand dictates flows.

P2 After discussion at meeting, posting procedures need better clarification.

During the meeting a WDFW map was used to suggest that points of compliance must be upgradient of anadromous salmon habitat and lakes and wetlands. WDFW shouldn't be able to dictate these areas which haven't been agreed upon by the District or USBR. These areas are part of irrigation facilities which are coincidental to CBP construction.

**Thank for the opportunity to comment on this draft permit. Please contact me if you need additional information.
(509)488-9671.**

**Elayne Fuller
efuller@ecbid.org**

